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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/614,833	07/12/2000	Rajugopal R. Gubbi	003498.P035	3152

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EXAMINER

VU, THONG H

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/614,833

Applicant(s)

GUBBI ET AL.

Examiner

Thong H Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-22 and 24-33 is/are rejected.
7) ☒ Claim(s) 23 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.5.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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1. Claims 1-33 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8,10-22,24-33 are rejected under 35 U.S.C. § 103 as being unpatentable over Semper et al [Semper 6,546,001 B1] in view of Huttunen et al [Huttunen 6,671,287 B1]
3. As per claim 1, Semper discloses a method comprising controlling access of computer network components to the network's communication medium as specified by a medium access control (MAC) protocol, the MAC protocol describing a MAC header, to facilitate the communication of MM data (i.e.: voice, video) between the network components [Semper, MAC header, control field, col 5 lines 55-67; voice signal, col 4 lines 25-32,54-67]

However Semper does not detail the MAC header comprising multimedia (MM) data, including a MM control field. A skilled artisan would have motivation to improve the Semper's apparatus by looking into the prior art. It was well-known in the art that a header has extension filed [Ma et al reference, page 91 col 1 lines 11-35], a header with other extension [Alexander, JR reference col 8 lines 37-53], a specific header extensions, Basso et al reference, page 2, col 1 lines 1-12], the future extensions of

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MAC header [Crawford, RFC2467, page 2, lines 1-9], MAC header with an optional extension fields [Huttunen reference, col 7 lines 13-60, Fig 6,7B].

An Official Notice is taken that a header with control information is well-known in the art [see Ahmadi, Lieberman, Brennand references]

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the optional extensions fields as taught by Huttunen into the Semper's apparatus in order to utilize the MAC header. Doing so would provide the MAC header extensions fields with multimedia data and multimedia control information.

4. Claims 25,32,33 contain the similar limitations set forth of apparatus claim 1. Therefore, claims 25,32,33 are rejected for the similar rationale set forth in claim 1.

5. As per claims 2,27 Semper-Huttunen disclose the communication is via a wireless medium [Semper, mobile unit, wireless network, col 4 lines 5-15,34-42].

6. As per claims 3,28 Semper-Huttunen disclose the communication is a radio frequency communication as inherent feature of wireless network.

7. As per claims 4,29 Semper-Huttunen disclose the radio frequency communication comprises frequency hopping spread spectrum schemes as inherent feature of wireless network.

8. As per claims 5,30 Semper-Huttunen disclose the radio frequency communication comprises direct sequence spread spectrum schemes as inherent feature of wireless network.
9. As per claims 6,31 Semper-Huttunen disclose the communication is an infrared communication as inherent feature of wireless network.
10. As per claims 7, Semper-Huttunen disclose a multimedia capability indicator in a management frame as inherent feature of network or Internet.
11. As per claim 8, Semper-Huttunen disclose the MAC protocol further defines a capability field within a management frame (i.e.: control field), the capability field comprising information regarding the network component multimedia capabilities as inherent feature of future MAC extension.
12. As per claim 10, Semper-Huttunen disclose a definition for a multimedia command frame as inherent feature of control field.
13. As per claim 11, Semper-Huttunen disclose multiple commands and acknowledgements transmitted from one network components to one or more of the network components [Semper, ACK, col 5 lines 50-55].

14. As per claim 12, Semper-Huttunen disclose one network component groups two or more multimedia commands intended for a second network component in a command sub-block as inherent feature of control field.

15. As per claim 13, Semper-Huttunen disclose the multimedia command frame further comprises a destination address and the command sub-block length as inherent feature of control field.

16. As per claim 14, Semper-Huttunen disclose a frame control field (FC) wherein a type for multimedia data communication may be indicated as inherent feature of control field.

17. As per claim 15, Semper-Huttunen disclose the FC field consists of the first 16 bits of the MAC header transmitted by the network component as design choice [see Boci reference].

18. As per claim 16, Semper-Huttunen disclose the MM control field comprises a frame position subfield as design choice [see Boci reference].

19. As per claim 17, Semper-Huttunen disclose the MM control field comprises a subfield to indicate the number of bytes padded with zeroes in the current frame as design choice [see Boci reference].

20. As per claim 18, Semper-Huttunen disclose the MM control field comprises a subfield to indicate an identification assigned to a group of network components communicatively coupled with another network component designated as a point coordinator as design choice [see Boci reference].

21. As per claim 19, Semper-Huttunen disclose the MM control field comprises a subfield to indicate an index number for a multimedia data stream being transmitted between the network components as design choice [see Boci reference].

22. As per claim 20, Semper-Huttunen disclose the MM control field comprises a subfield to indicate a frame number of a multimedia data stream frame associated with said MM control field as design choice [see Boci reference].

23. As per claim 21, Semper-Huttunen disclose the MM control field consists of 24 bits as design choice [see Boci reference].

24. As per claim 22, Semper-Huttunen disclose the 24-bit MM control field consists of five sub-fields as design choice [see Boci reference].

25. As per claim 24, Semper-Huttunen disclose the MM control field is the last MAC header field transmitted before transmitting a frame body as inherent feature of MAC.

26. As per claim 26, Semper-Huttunen disclose the interface is a network interface card (NIC) [Semper, transceiver, col 5 line 26-35].

27. Claim 9 is rejected under 35 U.S.C. § 103 as being unpatentable over Semper et al [Semper 6,546,001 B1] in view of Huttunen et al [Huttunen 6,671,287 B1] and further in view of Ahmadi et al [Ahmadi 5,384,777]

28. As per claim 9, Semper-Huttunen disclose a MAC header with extension fields for voice, data with control information [Semper, MAC header, control field, col 5 line 56- col 6 line 61] and Internet which included gateway/router (i.e.: coordinator) and Web server (i.e.: master coordinator). However Semper-Huttunen do not detail a set of parameters included in the initial communications between two network components, the parameters indicating whether the channel of communications is shared and/or the type of network component including proxy coordinator and master coordinator.

It was well-known in the Wireless LAN that a MAC protocol includes a header with control information, a sets of internal parameters and shared channel bandwidth [Ahmadi, MAC and wireless with voice and video, col 2 lines 4-25; header with control information, col 7 lines 35-52, set of parameters, col 7 lines 55-61, shared bandwidth, col 2 lines 4-25].

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the shared channel and a set of parameters as taught by Ahmadi into the Semper-Huttunen apparatus in order to utilize

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the wireless network. Doing so would provide a dynamic and efficient process to control scheme over wireless LAN.

Allowable Subject Matter

29. Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thong Vu, whose telephone number is (703)-305-4643.

The examiner can normally be reached on Monday-Thursday from 8:00AM- 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Jack Harvey*, can be reached at (703) 305-9705.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9700.

Any response to this action should be mailed to: Commissioner of Patent and Trademarks, Washington, D.C. 20231 or faxed to :

After Final (703) 746-7238

Official: (703) 746-7239

Non-Official (703) 746-7240

Hand-delivered responses should be brought to Crystal Park 11,2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Thong Vu
Patent Examiner
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